feebleness of intellect, or from the confused manner in which those collections have been laid up in his mind." Therefore to the architectural student, who is confused with the number of varying subjects open to his investigation, we would say:—let no style be decmed valueless, but choose that one as your chief model, which is best adapted to the requirements in view, and bears the character which you would wish to impress upon your works; discover the rules of art by careful examination and comparison of existing examples, always observing the precise intention of each. A theory which would banish precepts and data from our notice, with a view to originality, is inconsistent with all investigation, and would name education itself a thing valueless and baneful. The present imitation of Gothic architecture is at least better than the state of that style a few years back, when not only were the principles of pointed architecture, but the universal principles of art, caricatured and destroyed. Our present knowledge is meagre compared with what it may become when the immense number of churches in England have been examined and classified; our defective knowledge is the cause of the mere reproduction of old churches; but the day is at hand when originality will be as much the characteristic of modern Gothic architecture as of that of the middle ages. Therefore examine, study, and compare the Gothic churches of England; you will discover "more things than are dreamt of in some men's philosophy," and matter which lies not in books and portfolios. Gothic architecture is not to be acquired entirely at the office or the museum, but in the open air, and under the aspect of Nature, the creator and inseparable companion of the art. E. H.

ON THE ART OF CONSTRUCTION IN BRICKWORK.

No branch of the constructive arts is of greater magnitude and importance than that of bricklaying. Yet we are assured, and can testify from experience, that no trade stands more in need of improvement than this does. Persons of known ability from their habits and experience, have written upon and improved almost all other branches of the building art, and the constructive art of brickwork has been but very little noticed. The poverty of bricklayers' knowledge is a proverb, and is a disgrace to them. Bricklayers and brickwork have always of late years been considered of minor or secondary importance, and this is not to be wondered at. They scarcely have any knowledge whatever of the *general* arts of construction; beyond the mere routine of the scaffold, and packing and piling bricks upon each other, they very rarely attempt to soar. The public-house is their infected haunt. There they spend a great portion of their time and more of their money, revelling in drink, which impairs their faculties, and keeps themselves and their families always in beggary. We believe that if a series of cheap publications were thrown in their way, treating upon practical and the most necessary and striking problems of theoretical geometry, and the most approved methods of geometrical construction, as also an abridged treatise of practical mechanics, made plain, and divested of all technical phrases, but more especially a well-written, well-digested treatise upon brickwork, they would be induced to purchase them, and would become interested in their contents. This would lead to habits of study, which beget inquiry; and from thus understanding how interwoven are all the arts of construction, how dependent one thing is upon another, they would strive to improve themselves, and to execute work soundly and properly.

The desire of the writer is to give, if possible, an impetus to the introduction of a better system of executing brickwork, and to create among all parties, but bricklayers more particularly, an inquiring spirit for the attainment of so needful a purpose. Disposition in this, as in other matters, is every thing; where a person is not disposed to do any thing it is not all the advising or telling in the world will induce him to do it; but create the disposition, and the object is better than three parts attained. If we can induce a disposition in bricklayers to execute work soundly and properly, that is all that need be done; the thing will then work its own cure. It is impossible that some of the present ill-constructed dwellings can last many years; they will ever be in want of constant and extensive repairs, and, in consequence, the parties into whose hands they may fall, will be disposed to encourage better work, and that of a more durable description. Let every bricklayer who has the welfare of his trade at heart strenuously apply himself to its improvement; study the excellent and approved specimens and methods of his art which lie scattered around him, and endeavour to raise it to what it was in former times, namely, an art. We feel assured that there are at the present time throughout England, many bricklayers who are eminently qualified to impart this knowledge; and if any one thinks he has more knowledge on this subject than the generality of his fellow workmen, let him apply himself to the laudable task of freely communicating it. No matter how trifling the item of information may be, the aggregate, when collected and properly edited, will be of value, not only to the bricklayer, but to the whole building profession.

It is well known, and the history of past nations and people confirms the fact, that a general taste for the arts and sciences has a considerable tendency towards civilizing and elevating the moral character of the population. Whatever subject a man may be employed upon, if there be any thing in it which requires more than mere ordinary skill and contemplation, he immediately, when encouraged, seizes the opportunity, and throws his whole energy and spirit into it, becomes increasingly interested in its perfection, and endeavours to produce a work that shall rival all former productions. In olden times, when architectural adornment was sought for in the art of brickwork, extreme pains were evinced on the part of workmen not only to give the exterior work a clean, neat, and close appearance, but at the same time the arrangement of the bond of the interior of the walls, so as to produce the utmost strength and security, was strictly attended to, as is evidenced on observing the disposition and arrangement of the bricks in old walls. And in those times the art of brickwork was considered of primary importance, and its details and neatness of execution were to the architect as well as to the workman, a peculiar source of study and gratification.

Bricks when properly made, well-burnt and sound, and when properly laid, are equally as good, strong, and durable for walls as stone. In all alluvial countries where clay is abundant, and where stone is scarce and not easily to be obtained, good, sound, and ornamental brickwork appears to be indigenous and general. Very many and important buildings throughout the continent, but more especially those in Italy and the south of France have their various moulded forms and rich details of columns, pilasters, capitals, architraves, friezes, and cornices executed in brick. Many parts of the finest compositions of the old Italian and French architects are executed in the same material: it is wreathed into forms so elaborate and the workmanship is so clean, neat, and regular, as not to require the assistance of any excrescences of plastering to work it up, or to improve its appearance. And without going further than our own country, specimens of beautifully-executed brickwork may be seen in various parts where the soil has afforded the proper material for the manufacture of bricks.

Many parts of the ornamental details of the works of *Wren*, Inigo Jones, Vanburgh, Chambers, and indeed of many other architects since them, have been executed in brickwork, without the least dependance upon base, villainous cement-veneer. Beautiful specimens of excellently-executed ornamental brickwork may be observed in and about the metropolis. The back courts of Greenwich Hospital—the works of Jones and Wren—present most eminent examples of arched work; as also Chelsea Hospital, another work of Wren's. Although now in a dilapidated condition, Old Chelsea Church had originally considerable pretensions as an excellent piece of brickwork; indeed the whole neighbourhood of Chelsea affords very many well-executed examples, and more especially along Cheyne-walk, fronting the Thames.

Kensington, too, has its fair share of good brickwork, but by far the best specimens of it in this neighbourhood are the exteriors of Kensington-palace, and the conservatory in the gardens contiguous. This latter may be approached and closely examined; and again, and again, its beautiful well-performed work cannot fail to strike one with astonishment when compared with the villainous, falsely-called brickwork executing at the present time about the metropolis. The only fault to be observed in this beautiful piece of brickwork is in the key courses of the niche heads at the north-west angle of the building; and this must have arisen from a default in the *templet* mould used in forming the other courses. But more respecting this division of the art of bricklaying hereafter. Other examples of good old brickwork may be observed at Marlborough-house, the screen in front of Burlington-house, Piccadilly, Spring-gardens, St. Martin's-lane, and at the back of the Admiralty, all in the neighbourhood of St. James's-park; and the several streets in the immediate neighbourhood of Covent-garden, exhibit fair examples of this kind of work. Good specimens may also be seen scattered about in and around the City, and to the eastward of London. The fronts of several houses in Lincoln's-Inn-fields, and some piers there, present some very excellently executed work.

But no where in and about London, is there any thing in this department of the building art that can vie, or excel the beautiful specimens of well-executed ornamental brickwork that are to be found in and around the Temple-gardens, between Fleet-street and the Thames. A few hours spent here in contemplating these examples cannot be otherwise than both gratifying and instructive, and would teach bricklayers, if architects would give them the opportunities, to imitate the work. But it may be said that such work requires much time in its execution, and costs a great deal of money. Granted; but no work to be properly done can be performed without them. And, not a better argument can be brought forward in its favour, and as to its ultimate cheapness, than (although the present specimens may be worn with age, and what is not?) that they are nearly, if not quite, as firm, sound, and perfect as when they first passed out of the hands of the bricklayers; while the plastering or veneering on walls requires an incessant expenditure of money to keep it decent and in repair. How often do we see beautiful moulded and neat brick fronts of old houses in the metropolis being covered with a coarse veneer of wretched cement no better than mud, tinselled and tickled up to please the fancy and taste of the present time; thus blotting out the abilities and handiwork of our forefathers, which ought rather to be allowed to remain, or restored as it was executed, for workmen to contemplate and imitate, and improve upon it if they can.

In order that brickwork may be executed in a properly bonded, neat, and superior manner, it is necessary that much time and labour should be spent in its performance; but according to the present system of execution, by competition and on speculation, he who can execute the greatest quantity of work, without any attention or reference whatever to its character for quality and stability, in the least time, is considered the best and most useful workman. At the present time, the custom among bricklayers is, that he who will offer to execute work at the lowest possible prices is sure to be encouraged by employers, and thus obtains the work; and in consequence of this debasing practice, each and every one who is striving to obtain employment is lowering the prices of work, and cutting his fellow tradesman down. The general result of this mode of proceeding is, that after commencing a building, the bricklayer finds he cannot perform the work soundly and properly for the prices, and in order to make it pay him, is induced, at all hazards, to execute the work improperly from a desire to get as much money as possible. This, then, being the case, as well as to make the workmen earn their wages, they are forced to execute work in a hasty, careless, rotten, and insecure manner. This method of proceeding begets a recklessness in the general execution, and, in consequence, good work properly bonded is seldom, or never executed.

JOHN PHILLIPS.

*** We shall be glad to receive remarks and information on this subject from practical men, details of fire-work, &c.—ED.

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